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Abstract

Aim: To explore the enablers and barriers perceived by community nurses in the promotion of oral health in an Adult Community Trust Directorate.

Background: Oral healthcare promotion in community care settings is being neglected. England and Wales have witnessed marked improvements in periodontal disease; however, no improvements have been seen in older people.

Method: A qualitative methodology was employed, where eight nurses from Band 5 to 7 were interviewed using a semi-structured approach. The data was analysed thematically.

Findings: Data analysis was organised into four themes: Professional self-concept and the development of knowledge, skills and attitudes necessary in the promotion of oral health; the impact an organisation has on the promotion of oral health and an exploration of the enablers and barriers identified by the community nurses while delivering care; the relationships between the nurse and patient and the potential impact on oral health promotion; the concept of self-regard in relation to the promotion of oral health and its overall impact.

A commitment to improving oral health and requests for additional educational input was apparent. Organisational enablers and barriers were identified, alongside the crucial role a positive self-regard for oral healthcare may play in the promotion of oral health.

Conclusion: Nurses need relevant education, organisational support, adequate resources and support from a multi-disciplinary team to deliver optimal oral health promotion.

Key phrases and key words

Oral health; community nurses; attitudes; promotion; self-concept; barriers

Introduction

The neglect of oral health promotion in community nursing care has received considerable critical attention recently (Petersen *et al.*, 2010; Public Health England (PHE), 2015; National Institute for Health and Care Excellence (NICE), 2016). Worldwide concern has prompted numerous oral healthcare strategies (Weening-Verbree *et al.*, 2013; De Lugt-Lustig, 2014). Promotion of optimal oral hygiene can indeed improve and maintain the overall health and wellbeing of an older person (Miegel and Wachtel, 2009). Therefore, ensuring basic oral health care for patients in community nursing care is unquestionably a professional responsibility for nurses as part of a multi-disciplinary approach (Daly and Smith, 2015; Nursing and Midwifery Council (NMC), 2015).

Background

Life expectancy rates are improving, albeit alongside resultant co-morbidities (Horton, 2012) and a worldwide recognition of an increasing number of older people who will experience difficulty in maintaining optimal oral health (Nitschke *et al.*, 2010; McNally *et al.*, 2011; Yoon *et al.*, 2011; Willumsen *et al.*, 2012; Cornejo-Ovalle *et al.*, 2013; Porter *et al.*, 2015). Evidence suggests preventative oral hygiene interventions either by the individual or those providing nursing care are effective in achieving optimal oral health (Nitschke *et al.*, 2010; Kossioni, 2013; Porter *et al.*, 2015).

Decreased oral function in older people, alongside sub-optimal dental healthcare often precipitates malnutrition, which is a key risk factor in cognitive impairment (Beeckman, 2012; Zimmerman *et al.*, 2014). Moreover, a considerable body of literature has grown up around periodontal disease associated with upwards of over one hundred systemic diseases (Haumschild and Haumschild, 2009; Watt *et al.*, 2012; Zeng *et al.*, 2012; Casanova *et al.*, 2014).

Extensive research over the past decade has shown the prevalence of sub-optimal oral healthcare in residential care facilities remains problematic (Nitschke *et al.*, 2010; McNally *et al.*, 2011; Yoon *et al.*, 2011; Willumsen *et al.*, 2012; Cornejo-Ovalle *et al.*, 2013; Porter *et al.*, 2015). There have been a large number of studies by dental health professionals around oral healthcare for elderly people (Griffin *et al.*, 2012; Casanova *et al.*, 2014). However, previous studies have failed to consider enablers and barriers

to the promotion of oral health by nurses in community-dwelling care settings (Miegel and Wachtel 2009).

Aims and objectives

The overall aim of this research was to improve patient care and significantly contribute to better health outcomes for patients. The key objective was to explore the perceived enablers and barriers for community nurses in the promotion of oral health.

Design and methods

Qualitative methodology was selected to collect data from eight nurses across one Adult Community Nursing Directorate for this enquiry, with semi-structured interviews used as the method of data collection (Table 1). The interview questions were generated from a detailed literature review.

Table 1 – Description of Participants

Participant	Band	Years Qualified	Years worked in community
P1	6	41	23
P2	5	1	1
P3	5	1	1
P4	6	10	5
P5	6	6	3
P6	7	25	24
P7	7	28	21
P8	7	20	10

Sampling and recruitment

A non-probability purposive sampling technique (Parahoo, 2014) was used to further enhance the richness of exploration which can only be achieved if participants with a wide range of relevant experience are specifically chosen (Holloway and Galvin, 2017). All nurses from Band 5 to 7 working clinically within the Adult Community Directorate were emailed an invitation letter. The first eight responses comprising of various grades were selected. This was an acceptable sample and provided the breadth of experience required for the study (Parahoo, 2014). Sample size in qualitative research is often small by comparison to quantitative studies; however, this was not an issue as generalisation of the findings was not the aim (Parahoo, 2014). Moreover, a large sample size is not paramount in qualitative enquiry but rather the richness of data collected (Holloway and Galvin, 2017). Length of time qualified, banding and amount of community experience were not used as exclusion criteria; however, it was fortuitous nurses from various bands volunteered, as the study was able to elicit a broad range of experience. Band 5 nurses are community nurses, band 6 are district nurses or team leaders and band 7 are senior district nurses or team leaders registered on part 1 of the NMC register (Health Education England, 2015).

Data analysis

The audio recorded interviews were transcribed verbatim and checked for accuracy and a coding system added to the different meaning within the text, to enable a thematic analysis (Miles and Huberman, 1994). After extensively reading the text to aid overall comprehension, the next stage involved compiling interpretive summarisations of each interview. Data was compared and contrasted to illustrate shared practice and common meanings, identifying patterns that demonstrate thematic connections. The overall aim of the data analysis was convergence of data and comprehension of the phenomena (Polit and Beck, 2012). This manual use of descriptive analysis was used to improve credibility with deeper appreciation of the data, which computerised analysis is not always able to achieve (Gerrish and Lathlean, 2015).

Ethical considerations and funding

Ethics for healthcare researchers is concerned with a duty to protect the participants (Resnik, 2011; NMC, 2015). Beauchamp and Childress (2001) have devised a framework for researchers which emphasises important human rights, with four overarching principles of respect for autonomy, non-maleficence, beneficence and justice. Application of these principles was applied throughout not only to protect the participants from harm or risk, but also in adherence to professional codes and research guidelines (NMC, 2015; Royal College of Nursing (RCN), 2011).

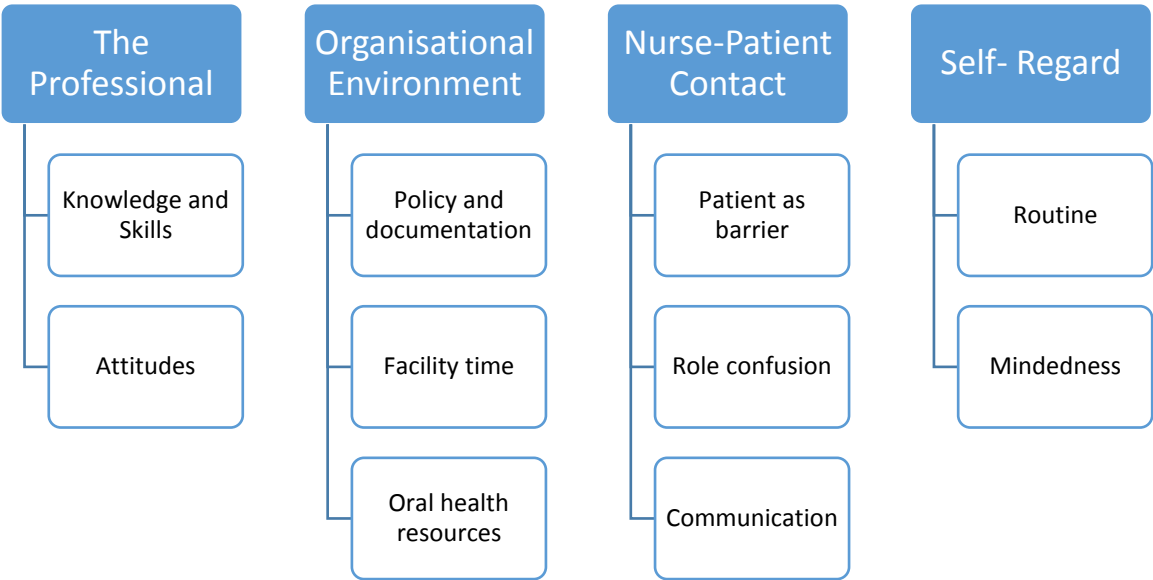
Ethical approval for this study was granted by the School of Health and Social Care's Ethics Committee and clearance given by the Directorate Lead and governance department.

At the time of the research the researcher was employed as a band 6 senior nurse working across the same community directorate as the participants. In an attempt to minimise insider researcher bias it was discussed at the beginning of the interviews the main motivation for this project was to explore the enablers and barriers perceived by community nurses in their promotion of oral health with elderly clients. Awareness of the potential for the development of control issues is crucial to the reliability of research (Gerrish and Lathlean, 2015). The Health Centre setting for the interviews and the participants' place of work may have had a bearing on the responses; however, by maintaining reflexivity an attempt was made to maintain data credibility (Parahoo, 2014). However, it has been argued the focus should be more on research than introspection (Sandelowski and Barosso, 2004).

Findings

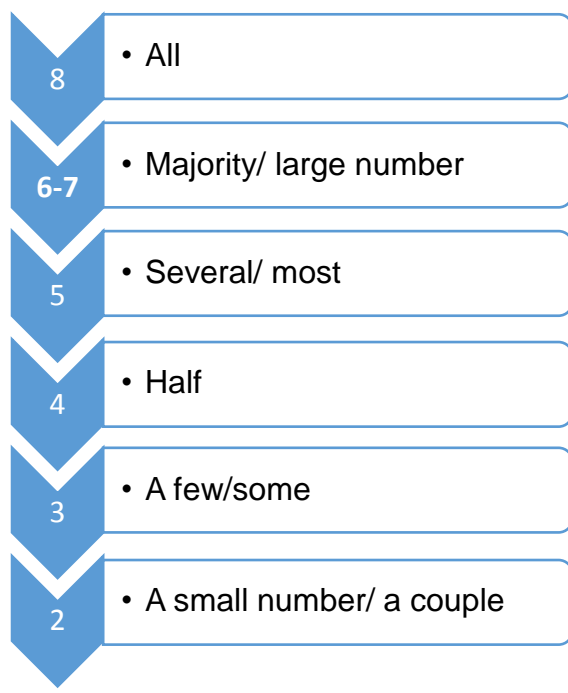
Thematic analysis identified four themes which were further divided into sub-themes (Table 2).

Table 2 – Summary of Themes and Sub-Themes



Raw data extracts from the participants will be used to support the analytical interpretations and a key has been provided as guide for the number of respondents (Table 3).

Table 3 Number of respondents and terms



The Professional

The majority of participants reported some training around tooth brushing during their pre-registration studies; however, post-registration, the majority of participants had received no formal training in oral health promotion whatsoever.

So as a student nurse we had some sessions on tooth brushing and oral healthcare, and since then I've had some ongoing training as a student nurse. Since qualification we haven't had any. (P1)

When asked what would enable the participants in the promotion of oral health, they all reported the need for more educational input.

I think having training on what we should be looking for... these are the things we should be looking for and this is a very clear referral pathway'. (P2).

All of the participants recognised the promotion of oral health as a fundamental aspect of care.

...we need to be encouraging our patients to get a denture review. (P6).

Indeed, all the participants were able to discuss the crucial role it plays in enhancing the overall health and wellbeing of the patient.

We've got wound care and all those sorts of things, but what about oral care, what about it? If you haven't got teeth in your head it doesn't mean that you haven't got something going on in your mouth, (P1)

However, for most of the participants, oral health promotion was only initiated where there was an identified issue rather than as a preventative measure.

I think it's not necessarily something that's actually on my radar massively in the community, I feel like when I was on the ward definitely that was one of the tick boxes. (P3).

Organisational Environment

All participants reported oral health promotion was not guided by specific policies within the Trust.

So yes, maybe an update, maybe an assessment form, you know, a quick tick box of what you're looking out for, and referral guidelines; I mean, maybe there are some but, you know, 'If you tick this many boxes refer to this' or some sort of guidance.(P5).

A small number of participants suggested there was insufficient time to promote oral health.

So for example if you're looking at oral hygiene as opposed to a massive gaping wound, which one of those do you have to build your time around, and I'm going to be honest with you, we don't do it enough. (P7)

Financial restraints in the present healthcare climate were alluded to in the data.

Basically there's no equipment, probably a tongue depressor, but then there is no equipment really, so it's just a visual look and then you ask patients about when they last visited the dentist. (P7)

Availability of appropriate promotional media was mentioned:

I would say we need more information, just looking at the leaflets, if we had leaflets and the signposts that wouldn't get ignored, if there was a leaflet with a clear signpost with [Trust], what we offer, then that would be the best thing we could do. (P7)

Nurse-Patient Contact

The reluctance of patients to allow an assessment of the oral cavity was also expressed.

I think it can be quite taboo in the sense that patients are maybe quite happy for me to look at a wound, an external wound, but for me to be quite invasive by looking into their mouth, there may be a bit more reluctance for that. (P2)

There was concern patients felt judged when trying to promote oral health and a confusion of role was often expressed.

People feel judged, I really feel that people feel judged, we're not dental nurses so people feel judged, families feel judged. (P7)

Participants were mindful of using careful communication, especially when the patient has multiple complex conditions.

....and about how you try as best as possible try not to make it sound like it's being punitive to them, and trying to explain why you're promoting it and what implication it has on other aspects of their health. (P8)

Self- Regard

All the participants demonstrated a positive self-regard for their own oral health hygiene.

so I actually floss my teeth about two, three times a day. I mean, I'm probably going to floss my teeth now. I use obviously inter-dental brushes, I use electric toothbrushes, I go to the dentist every four months, I go to the dental hygienist every four months. So for me oral health is very important, it really is important. (P1)

There was also a variance in motivation for maintaining optimal oral health, with participants citing emotional, social and preventative reasons.

So I suppose I take it seriously because I feel that I should as a nurse, so it would be obviously brushing my teeth, eating a balanced diet, attending dental visits, and making sure that if there was a concern that that's then followed up. (P2).

Discussion

This qualitative study set out with the aim of assessing the perceived enablers and barriers in the promotion of oral health by community nurses working within an Adult Community Directorate.

Many community-dwelling patients have sub-optimal oral health due to reduced self-capability and utilization of oral healthcare (Kossioni, 2013). Neglect or lack of awareness by nurses of the important role oral health plays in overall wellbeing may be affecting this provision (PHE, 2014). Overall, the findings demonstrate an understanding of the importance of oral health and a level of awareness connecting it with maintaining holistic health and wellbeing. However, there remains a crucial concern, particularly in terms of the apparent oral health knowledge and skills deficit. Indeed, the most obvious finding to emerge from the analysis is the majority of nurses had only received a limited amount of oral health educational input and this was mostly pre-registration. This finding is consistent with previous studies, where education of nurses in oral health and periodontal disease has generally remained a low priority in training programmes (Samson *et al.*, 2009).

Oral health education programmes presented to nurses have proved successful (Kullberg *et al.*, 2010; Forsell *et al.*, 2011; Cornejo-Ovalle *et al.*, 2013; De Lugt-Lustig *et al.*, 2014), with resultant beneficial outcomes for the patient (Unfer *et al.*, 2012; van der Putten *et al.*, 2012). Conversely, studies have also reported no improvements (Reed *et al.*, 2006), especially long term. Interestingly, Fallon *et al.* (2006) found the implementation of various teaching formats with a strong emphasis on practical skills was more effective in improving oral health knowledge absorption. However, these findings raise intriguing questions regarding a lack of historical requests for oral health education by the participants, given their apparent self-reporting of a deficit in knowledge and skills.

An interesting observation is that the promotion of oral health mainly occurred when there was an identified issue such as pain, rather than as a preventative measure. What is encouraging, however, is the commitment by the participants to improve their practice with additional training. However, it would be too simplistic to suggest improved oral health outcomes could be achieved solely by introducing educational programmes. Indeed, it has been asserted a fundamental change in attitude and mindset is what is actually required (De Lugt-Lustig *et al.*, 2014).

Improvements and maintenance of oral health urgently requires the implementation of oral hygiene policy and guidelines (NICE, 2016). The results of this study show participants were keen to have access to documentation and guidelines in support of oral health promotion. Person-centred oral healthcare plans are instrumental in partnership working and improved oral health outcomes (NICE, 2016).

Lack of resources was discussed as a potential barrier to the promotion of oral health. Financial constraint within healthcare is a significant contributing factor to the sub-optimal level of oral health apparent in dependent patients with a high turnover of staff, staff shortages and heavy workload placing competing demands on caregivers (Gately *et al.*, 2010; Willumsen *et al.*, 2011; Forsell *et al.*, 2011; McNally *et al.*, 2012; De Visschere *et al.*, 2013). Even if there were improvements in education, training and awareness, healthcare professionals would require adequate time and resources to be able to actually promote oral health.

Community nurses have professional responsibility for the promotion of oral health (NMC, 2015), and the barriers they have encountered are crucial to this discussion. Participants discussed the psycho-social resistance they have met when trying to promote oral health. In light of these findings, it would seem paramount nurses are confident and comfortable in the promotion of oral health, to be able to assist patients in maintaining optimal oral health.

Patients and indeed nurses may not consider oral hygiene to be particularly important to overall wellbeing. This reflects the cultural differences between dental professionals and other healthcare professionals suggested by Andersson *et al.* (2007), who concluded both District Nurses and General Practitioners find oral healthcare to be a matter for dentistry. It could be argued the consequences of sub-optimal oral care are much more salient with dental professionals than other health professionals and patients given their knowledge base. Insufficient regard for oral health promotion in both pre and post-registration nursing education programmes has been recognised as a major barrier in the sub-optimal levels of care given to elderly patients in both acute and residential care settings (De Lugt-Lustig *et al.*, 2014). Therefore, inclusion of more oral-health related pedagogy is needed in nursing curricula, alongside educational input into the psychological aspects of how to develop therapeutic interactions with patients who do not want to engage in oral health promotion.

Perhaps the most clinically relevant finding was the self-reported importance the nurses attached to their own oral health. The contrast, however, with the apparent lack of oral health promotion within the community setting is noteworthy. Their evident self-regard for oral health promotion was based on evidenced based practice, personal research and frequent dentition visits. Perhaps the nurses have historically not felt the need for educational input on oral health given they have always looked after their own oral health. Perhaps they do not value training and development in this area of practice. Perhaps the same rhetoric is being applied to patients. However, it is important to note the positive self-regard for oral health certainly offers an excellent premise upon which to build a strategy aimed at improving the oral health of patients.

Limitations of study

In this investigation there are several sources for error. Only 8 nurses out of a population of 400 in the Adult Community Directorate were interviewed for this service evaluation. The size of the dataset may have made the findings contextually specific, leading to subsequent bias (Parahoo, 2014). In addition, responses may have been nuanced by professional elements in the semi-structured interviews, with the effect of sensitising their awareness and knowledge (Cowan, 2009). The responses may also have been affected by an awareness of professional standards expected of nurses (Green and Thorogood, 2009; NMC, 2015).

Implications for practice

Continued efforts are needed to sensitise nurses to oral health issues whereby they become champions for change, advocating regular dental examinations and oral hygienist treatments (Nitschke *et al.*, 2010).

The request for more educational input has a number of important implications for training requirements. It has been suggested training measures should be individually tailored to take an individual's attitude to oral health care into account (Nitschke *et al.*, 2010).

For healthcare professionals who rate the oral health of their clients lower than their own, a more radical approach may be needed to address the inequity of care provision. For the proportion of nurses with a high regard for the oral health of all stakeholders,

participation in specialist training aimed at improving the motivational aspects of health promotion could be used to enhance awareness and dissemination of the message to a wider audience (Porter *et al.*, 2015).

Future research

Further research might explore why some nurses are not more vocal in requesting training in areas where there is an apparent deficit. Organisational enablers and barriers should be researched in more depth and rather than only focussing on educational deficits there should be attention paid to staffing levels which enables nurses to provide holistic care. Further studies need to be carried out to determine the efficacy of continuous education delivery and the use of training workshops in improving the therapeutic relationships between nurse and patient. Considerably more work needs to be done to determine whether the personally acquired knowledge and attitude towards one's own oral health needs is a determinant of the quality of promotion delivered by nurses.

CONCLUSION

This study explored the perceived enablers and barriers of a small sample of community nurses in the promotion of oral health. Sub-optimal promotion of oral health remains a worldwide issue, stemming perhaps from educational and organisational factors rather than pervading negative attitudes or lack of support from nurses. Indeed, it could be argued the promotion of oral health is not a poorly operationalised fundamental of care, rather it is a crucial aspect of care provision lacking in organisational support. In view of the current austerity measures facing healthcare, increasing caseloads, increased levels of acuity, staff shortages, and cuts to training and education, there is a genuine concern the informal contribution made by families to the delivery of care will eventually become an essential aspect of care planning in community care settings. Nurses must therefore be vocal about inadequate resources in their support of oral health promotion and the quality of care provision, if both patient and families are not to be neglected or over-burdened. From a practical standpoint, determining the availability of a range of resources from Health Education England and third sector organisations such as Age UK needs to form the basis for future research. In addition, ensuring greater emphasis on intercollegiate associations with

dental professionals could also prove a viable route to expanding limited resources. Nurses want to promote oral health and have been vocal in requesting support. To ensure we can deliver quality oral health promotion, nurses clearly need the relevant education, organisational support, adequate resources and support from a multi-disciplinary and wider integrated team including dentists and oral hygienists.

Declaration of interest: none.

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